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| 09/822,906 | 03/29/2001 | Alireza Raissinia | CISCP672 | 9028 |

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Cindy S. Kaplan
P.O. BOX 2448
SARATOGA, CA 95070

| EXAMINER | |
|---|---|
| MOORE, IAN N | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2661 | |

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/822,906 | RAISSINIA ET AL. | |
| | Examiner | Art Unit | |
| | Ian N. Moore | 2661 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *30 November 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 November 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Claim Objections*

1. Claims 5,13,18, 20 and 22 are objected to because of the following informalities:

**Claim 13** recites, "**the** subscriber unit" in line 6 and "a selected subscriber unit" in line 5. It is unclear whether "**the** subscriber unit" in line 6 is the same unit as "a selected subscriber unit" in line 5.

**Claims 5,18 and 20** are also objected for the same reason as stated above.

**Claim 22** recites, "**an** OFDM burst" in line 2. It is unclear whether "**an** OFDM burst" in line 2 is the same OFDM burst as "**an** OFDM burst" recited in claim 1, line 5.

Appropriate correction is required.

### First set of rejection

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claim 1,2,5,6,9,10,14 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryan (US006333937B1) in view of Grabelsky (US006169744B1).

**Regarding Claims 1,9,17 and 19**, Ryan discloses an apparatus for operating a subscriber unit (see FIG. 1, Remote Station R0 or R1) to request access (see FIG. 1, access request) to a common transmission medium (see FIG. 1, wireless

network/medium; see col. 4, lines 60-67; OFDM wireless network/medium), said apparatus comprising:

a MAC layer processor (see FIG. 1-3, R0 or R1's MAC layer; see col. 5, lines 50-60) that receives an exclusive assignment to a toneset (see FIG. 4 A, C, D, Tones; see col. 5, lines 15-20; see col. 6, lines 25-50) within an OFDM burst structure (see col. 6, lines 20-50; OFDM burst) and

an access request burst formation block (see FIG. 2, a combined system of logic 202,regirsters 242,178,180, and transmission portion of remote station, or FIG. 3, R0) that transmits an OFDM burst (see col. 6, lines 20-50; OFDM burst) using tones specified by said assignment while leaving other tones in said OFDM burst available for use by other subscriber units (see col. 5, lines 15-20; col. 6, lines 4-50; each tones are specifically/exclusively assigned to each remote station), and

wherein said OFDM burst comprises an access request OFDM burst (see col. 5, lines 1-10, OFDM common access channel burst); and

transmitting data over said common transmission medium using an assigned time slot (see FIG. 1 and 4A,C,D; transmitting via allocated tone/channel/time slot; see col. 4, line 61 to col. 5, line 4, 21-25; see col. 6, lines 25-50).

Ryan does not explicitly disclose during an inactive period. However, transmitting/receiving during an inactive/silent period to avoid is well known in the art. In particular, Grabelsky teaches a station transmitting/receiving during an inactive period (see FIG. 4A-B, transmitting during a silent period/interval; see col. 5, line 21-44). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide transmitting/receiving during a silent/inactive

period/interval of MAC protocol, as taught by Grabelsky in the system of Ryan, so that it would provide fast contention resolution; see Grabelsky col.2, line 9-15, 20-23, see col. 3, line 10-16; see col. 5, line 21-23.

**Regarding Claims 2 and 10**, Ryan discloses converting said OFDM burst into the time domain prior to transmitting said OFDM burst (see col. 4, lines 35-45; frequency to time conversion).

**Regarding Claim 5, 13, 18, 20**, Ryan discloses an apparatus for operating a central access point (see FIG. 1, Base Station Z0) to control access to a common transmission medium (see FIG. 1, wireless network; see col. 4, lines 60-67; OFDM wireless network), said apparatus comprising:

a MAC layer processor (see FIG. 1, Base Station's MAC layer; see col. 6, lines 4-15) that sends an exclusive assignment to a toneset (see FIG. 4 A, C, D, Tones; see col. 5, lines 15-20; see col. 6, lines 25-50) within an OFDM burst structure (see col. 6, lines 20-50; OFDM burst) to a selected subscriber unit during a period at the subscriber unit (see FIG. 1-3, remote station R0 or R1); and

a request access processor (see FIG. 2, a combined system of allocation manager 215, registers 200,221,240,241, table 230, and receiving portions of Base station Z0) that receives an access request OFDM burst that includes said toneset as transmitted from said selected subscriber unit (see col. 4, lines 60 to col. 5, lines 20; see col. 6, lines 25-50); and

wherein in response to said access request OFDM burst, said MAC layer processor assigns at least one time slot to said selected subscriber unit for use of said common transmission medium (FIG. 4 A, C, D, the combined system assigns/allocates

time slots for subscriber; see col. 4, lines 60 to col. 5, lines 20; col. 5, lines 15-20; see col. 6, lines 25 to col. 7, lines 6).

Ryan does not explicitly disclose during an inactive period. However, transmitting/receiving during an inactive/silent period to avoid collision is well known in the art. In particular, Grabelsky teaches a station transmitting/receiving during an inactive period (see FIG. 4A-B, transmitting during a silent period/interval; see col. 5, line 21-44). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide transmitting/receiving during a silent/inactive period/interval of MAC protocol, as taught by Grabelsky in the system of Ryan, so that it would provide fast contention resolution; see Grabelsky col.2, line 9-15, 20-23, see col. 3, line 10-16; see col. 5, line 21-23.

**Regarding claims 6 and 14**, Ryan discloses wherein said access request OFDM burst includes access request information from subscriber units other than said selected subscriber unit (see col. 5, lines 15-20).

4. Claims 3,7,11, 15, and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryan in view of Grabelsky, as described above in claims 1,5,9,13, and further in view of Beser (US006847635B1).

**Regarding claims 3, 7, 11 and 15**, the combined system of Ryan and Grabelsky discloses transmitting OFDM burst signals as described above in claims 1, 5, 9 and 13.

Neither Ryan nor Grabelsky explicitly discloses termination of a silent period in a voice call. However, Beser teaches wherein transmitting said request signals termination of a silent period in a voice call (see col. 2, lines 26-44).

In view of this, having the combined system of Ryan and Grabelsky and then given the teaching of Beser, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Ryan and Grabelsky, by sending request message termination of a silent period in a voice call, as taught by Beser. The motivation to combine is to obtain the advantages/benefits taught by Beser since Beser states at col. 1, line 60-67 that such modification would accurately and quickly transmit voice call from a user to another user by utilizing the data packet carrying ability of network; and also by sending starting/stopping request, the time slots are not wasted during silent portions; see Beser col. 2, line 65 to col. 3, line 2.

**Regarding claim 21**, the combined system of Ryan and Grabelsky discloses the inactive period as a silent period as described above in claim 1.

Neither Ryan nor Grabelsky explicitly discloses in a voice call. However, having a silent period in a voice call is well known in the art. Beser teaches wherein inactive period is a silent period in a voice call (see col. 2, lines 26-44; see col. 5, line 10-16; see col. 6, line 3-20, 41-55).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to detect/define a silent period in a voice call, as taught by Beser in the combined system of Ryan and Grabelsky, so that it would accurately and quickly transmit voice call from a user to another user by utilizing the data packet carrying ability of network; and also by detecting silent period in a voice call, the time slots are not wasted during silent portions of the voice call, thereby providing efficient allocation; see Beser col. 2, line 65 to col. 3, line 2.

**Regarding claim 22**, the combined system of Ryan and Grabelsky discloses an OFDM burst as described above in claims 1.

Neither Ryan nor Grabelsky explicitly discloses in response to activity. However, transmitting a burst in response to detecting activity is well known in the art. Beser teaches transmitting a burst in response to detecting activity (see col. 2, lines 26-44; see col. 4, line 54 to col. 5, line 55; col. 6, line 4-55).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to transmit in response to activity, as taught by Beser in the combined system of Ryan and Grabelsky, so that it would accurately and quickly transmit voice call from a user to another user by utilizing the data packet carrying ability of network; and also provides faster service to the subscribers; see Beser col. 2, line 50 to col. 3, line 2.

**Regarding claim 23**, the combined system of Ryan and Grabelsky discloses transmitting an OFDM burst as described above in claim 1.

Neither Ryan nor Grabelsky explicitly discloses receiving data slot grants. However, receiving grants in response to transmitting the burst is well known in the art. Beser teaches receiving data slot grants in response to transmitting the burst (see col. 4, line 36 to col. 5, line 55; col. 6, line 4-55).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to receive data slot grants, as taught by Beser in the combined system of Ryan and Grabelsky, so that it would accurately and quickly transmit voice call from a user to another user by utilizing the data packet carrying ability of

network; and also provides faster service to the subscribers; see Beser col. 2, line 50 to col. 3, line 2.

**Regarding claim 24**, Ryan discloses wherein said toneset comprises a predefined number of tones (see FIG. 4 A, C, D, Tones; see col. 5, lines 15-20; see col. 6, lines 25-50). Grabelsky also discloses a predefine number of tones (see col. 5, line 55-60).

5. Claims 4,8,12 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryan in view of Grabelsky, as described above in claims 1, 5, 9 and 13, and further in view of Hartman (US 20020101946A1).

**Regarding claims 4, 8, 12, and 16**, Ryan discloses transmitting OFDM burst comprises transmitting said burst in a time slot determined by MAC layer protocol (see FIG. 3-4, OFDM time slot by MAC layer; see col. 5, lines 15-60; col. 6, lines 25-50).

Neither Ryan nor Grabelsky explicitly discloses DOCSIS. However, Hartman teaches wherein transmitting herein transmitting said OFDM burst comprises transmitting said burst in a time slot determined by a DOCSIS MAC layer protocol (see page 1, paragraph 4,5,7; see page 3, paragraph 33,38; see page 4, paragraph 49; see page 5, paragraph 64-65; Table 1-2, transmitting OFDM burst in a time slot in accordance DOCSIS MAC).

In view of this, having the combined system of Ryan and Grabelsky, and then given the teaching of Hartman, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Ryan and Grabelsky, by utilizing DOCSIS MAC standard, as taught by Hartman. The motivation to combine is to obtain the advantages/benefits taught by Hartman since Hartman states at

page 1, paragraph 10-11; see page 5, paragraph 64; that such modification would transmit voice over wireless network that can utilized the existing OFDM infrastructure without substantially and costly changes.

**Second set of rejection**

6. Claim 1,2,5,6,9,10,14 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over McFarland (US006628673B1) in view of Grabelsky (US006169744B1).

**Regarding Claims 1,9,17 and 19**, McFarland discloses an apparatus for operating a subscriber unit (see FIG. 3, nodes such as phone 100, organizer 200 or laptop 300) to request access to a common transmission medium (see FIG. 1, a transmission medium; see col. 4, lines 10-36, 50-55; request/requirement access to allocate for a transmission medium), said apparatus comprising:

a MAC layer processor (see FIG. 3, a combined system of 320, 340 and 330 with MAC layer processing in accordance IEEE 802.11, WLAN; see col. 7, lines 10-40) that receives an exclusive assignment to a toneset (see FIG. 3, sub-channel/frequency/symbols/tones 250; see col. 1, lines 44-50;see col. 4, lines 22-32; 55-64; sub-channel/frequency/symbols/tones 250) within an OFDM burst structure (see col. 4, lines 4-9; 50-60; OFDM channel/burst) and

an access request burst formation block (see FIG. 2, a combined system of 350 and 320) that transmits an OFDM burst (see col. 4, lines 4-9; 50-60; OFDM channel/burst) using tones specified by said assignment while leaving other tones in said OFDM burst available for use by other subscriber units (see FIG. 5; see col. 4, lines 50-

67; col. 6, lines 3-42; each sub-channel/frequency/symbols/tones are specifically/exclusively assigned to each station, and setting other sub-channel/frequency/symbols/tones to zero for other stations), and

wherein said OFDM burst comprises an access request OFDM burst (see col. 4, lines 4-9; 50-60; see col. 5, lines 50-56; OFDM channel/burst request access for allocation);

transmitting data over said common transmission medium using an assigned time slot (see FIG. 3 and 5; transmitting via allocated channel/time-slot; see col. 3, line 60-67; col. 4, lines 34-40, 50-67; col. 5, line 65 to col. 6, line 35).

McFarland does not explicitly disclose during an inactive period. However, transmitting/receiving during an inactive/silent period to avoid is well known in the art. In particular, Grabelsky teaches a station transmitting/receiving during an inactive period (see FIG. 4A-B, transmitting during a silent period/interval; see col. 5, line 21-44). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide transmitting/receiving during a silent/inactive period/interval of MAC protocol, as taught by Grabelsky in the system of McFarland, so that it would provide fast contention resolution; see Grabelsky col.2, line 9-15, 20-23, see col. 3, line 10-16; see col. 5, line 21-23.

**Regarding Claims 2 and 10**, McFarland discloses converting said OFDM burst into the time domain prior to transmitting said OFDM burst (see col. 4, lines 1-60; FFT, Fast Fourier Transform between frequency and time).

**Regarding Claims 5,13, 18, 20**, McFarland discloses apparatus for operating a central access point (see FIG. 3, Base Station 400) to control access to a common

transmission medium (see FIG. 1, a transmission medium; see col. 4, lines 10-36, 50-55; request/requirement access to allocate for a transmission medium), said apparatus comprising:

a MAC layer processor (see FIG. 3, a combined system of 420, 440 and 430 with MAC layer processing in accordance IEEE 802.11, WLAN; see col. 7, lines 10-40) that sends an exclusive assignment to a toneset (see FIG. 3, sub-channel/frequency/symbols/tones 250; see col. 1, lines 44-50;see col. 4, lines 22-32; 55-64; sub-channel/frequency/symbols/tones 250) within an OFDM burst structure (see col. 4, lines 4-9; 50-60; OFDM channel/burst) to a selected subscriber unit (see FIG. 3, nodes such as phone 100, organizer 200 or laptop 300); and

a request access processor (see FIG. 2, a combined system of 450 and 420) that receives an access request OFDM burst that includes said toneset as transmitted from said selected subscriber unit (see col. 4, lines 60 to col. 5, lines 20; see col. 6, lines 25-50); and

wherein in response to said access request OFDM burst, said MAC layer processor assigns at least one time slot to said selected subscriber unit for use of said common transmission medium (see FIG. 3 and 5; the combined system assigns/allocates time slots for a node/laptop; see col. 4, lines 60 to col. 5, lines 20; col. 5, lines 15-20; see col. 6, lines 25 to col. 7, lines 6).

McFarland does not explicitly disclose during an inactive period. However, transmitting/receiving during an inactive/silent period to avoid is well known in the art. In particular, Grabelsky teaches a station transmitting/receiving during an inactive period (see FIG. 4A-B, transmitting during a silent period/interval; see col. 5, line 21-44).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide transmitting/receiving during a silent/inactive period/interval of MAC protocol, as taught by Grabelsky in the system of McFarland, so that it would provide fast contention resolution; see Grabelsky col.2, line 9-15, 20-23, see col. 3, line 10-16; see col. 5, line 21-23.

**Regarding claims 6 and 14**, McFarland discloses wherein said access request OFDM burst includes access request information from subscriber units other than said selected subscriber unit (see col. 4, lines 35-65; see col. 6, lines 1-35).

7. Claims 3,7,11, 15, and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over McFarland in view of Grabelsky, as described above in claims 1,5,9,13, and further in view of Beser (US006847635B1).

**Regarding claims 3,7,11 and 15**, the combined system of McFarland and Grabelsky discloses transmitting OFDM burst signals as described above in claim 1, 5,9, 13.

Neither McFarland nor Grabelsky explicitly discloses termination of a silent period in a voice call. However, Beser teaches wherein transmitting said request signals termination of a silent period in a voice call (see col. 2, lines 26-44).

In view of this, having the combined system of McFarland and Grabelsky, then given the teaching of Beser, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of McFarland and Grabelsky, by sending request message termination of a silent period in a voice call, as taught by Beser. The motivation to combine is to obtain the advantages/benefits taught

by Beser since Beser states at col. 1, line 60-67 that such modification would accurately and quickly transmit voice call from a user to another user by utilizing the data packet carrying ability of network.

**Regarding claim 21**, the combined system of McFarland and Grabelsky discloses the inactive period as a silent period as described above in claim 1.

Neither McFarland nor Grabelsky explicitly discloses in a voice call. However, having a silent period in a voice call is well known in the art. Beser teaches wherein inactive period is a silent period in a voice call (see col. 2, lines 26-44; see col. 5, line 10-16; see col. 6, line 3-20, 41-55).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to detect/define a silent period in a voice call, as taught by Beser in the combined system of McFarland and Grabelsky, so that it would accurately and quickly transmit voice call from a user to another user by utilizing the data packet carrying ability of network; and also by detecting silent period in a voice call, the time slots are not wasted during silent portions of the voice call, thereby providing efficient allocation; see Beser col. 2, line 65 to col. 3, line 2.

**Regarding claim 22**, the combined system of McFarland and Grabelsky discloses an OFDM burst as described above in claims 1.

Neither McFarland nor Grabelsky explicitly discloses in response to activity. However, transmitting a burst in response to detecting activity is well known in the art. Beser teaches transmitting a burst in response to detecting activity (see col. 2, lines 26-44; see col. 4, line 54 to col. 5, line 55; col. 6, line 4-55).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to transmit in response to activity, as taught by Beser in the combined system of McFarland and Grabelsky, so that it would accurately and quickly transmit voice call from a user to another user by utilizing the data packet carrying ability of network; and also provides faster service to the subscribers; see Beser col. 2, line 50 to col. 3, line 2.

**Regarding claim 23**, the combined system of McFarland and Grabelsky discloses transmitting an OFDM burst as described above in claim 1.

Neither McFarland nor Grabelsky explicitly discloses receiving data slot grants. However, receiving grants in response to transmitting the burst is well known in the art. Beser teaches receiving data slot grants in response to transmitting the burst (see col. 4, line 36 to col. 5, line 55; col. 6, line 4-55).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to receive data slot grants, as taught by Beser in the combined system of McFarland and Grabelsky, so that it would accurately and quickly transmit voice call from a user to another user by utilizing the data packet carrying ability of network; and also provides faster service to the subscribers; see Beser col. 2, line 50 to col. 3, line 2.

**Regarding claim 24**, McFarland discloses wherein said toneset comprises a predefined number of tones (see col. 1, lines 44-50;see col. 4, lines 22-32; 55-64; sub-channel/frequency/symbols/tones 250). Grabelsky also discloses a predefine number of tones (see col. 5, line 55-60).

8. Claims 4,8,12 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over McFarland in view of Grabelsky, as described above in claims 1, 5, 9 and 13, and further in view of Hartman (US 20020101946A1).

**Regarding claims 4, 8, 12, 16**, McFarland discloses transmitting OFDM burst comprises transmitting said burst in a time slot determined by MAC layer protocol (see FIG. 5, OFDM time slot via MAC layer; see col. 7, lines 10-40; col. 4, lines 4-9; 50-60).

Neither McFarland nor Grabelsky explicitly discloses DOCSIS. However, Hartman teaches wherein transmitting herein transmitting said OFDM burst comprises transmitting said burst in a time slot determined by a DOCSIS MAC layer protocol (see page 1, paragraph 4,5,7; see page 3, paragraph 33,38; see page 4, paragraph 49; see page 5, paragraph 64-65; Table 1-2, transmitting OFDM burst in a time slot in accordance DOCSIS MAC).

In view of this, having the combined system of McFarland and Grabelsky, then given the teaching of Hartman, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of McFarland and Grabelsky, by utilizing DOCSIS MAC standard, as taught by Hartman. The motivation to combine is to obtain the advantages/benefits taught by Hartman since Hartman states at page 1, paragraph 10-11; see page 5, paragraph 64; that such modification would transmit voice over wireless network that can utilized the existing OFDM infrastructure without substantially and costly changes.

***Response to Arguments***

9. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

**Regarding claims 3,7,11,15, the applicant argued that,** "...the proposed modification of Ryan would defeat the primary functionality of Ryan method...it would not be obvious to make a modification in such instances..." in page 12, paragraph 2.

**In response to applicant's argument**, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, that examiner is not "physically" or "bodily" incorporating Ryan's system with Beser's system, **rather examiner is modifying Ryan with the "teaching" of Beser.**

Moreover, as recited above, Ryan discloses transmitting/receiving of OFDM burst signals between stations. Beser also discloses the transmitting/receiving signals terminating of silent period (i.e. resuming activity interval/period) to resume a voice call between stations. Both Ryan and Beser utilize MAC protocol for transmitting/receiving. Thus, it would have been **very obvious** to one having ordinary skill in the art at the time the invention was made to modify the combined system of Ryan and Grabelsky, by Beser as disclosed above. (Emphasis added).

***Conclusion***

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian N. Moore whose telephone number is 571-272-3085. The examiner can normally be reached on 9:00 AM- 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

INM
1/6/05

CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600